AMENDMENTS TO THE CLAIMS

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

1-21. (Canceled)

22. (Currently Amended) A method of detecting a gene activation event in a cell *in vivo* which is the result of induction of toxicological stress, the method comprising assaying a transgenic ~~rodent~~ mouse whose cells express a peptide-tagged beta-lactoglobulin protein as a reporter gene in which the beta-lactoglobulin is coded for by a nucleic acid construct comprising (i) a nucleic acid sequence encoding beta-lactoglobulin, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues, in which the ~~rodent~~ mouse is subjected to a gene activation event by toxicological stress that is signaled by expression of [[a]] the peptide tagged beta-lactoglobulin reporter gene.

23. (Previously Presented) The method of claim 22, wherein the beta-lactoglobulin protein is heterologous to the cell in which it is expressed.

24. (Canceled)

25. (Previously Presented) The method of claim 22, wherein the beta-lactoglobulin is ovine betalactoglobulin (BLG) (SEQ ID NO: 23).

26. (Previously Presented) The method of claim 24, wherein the peptide sequence is an epitope.

27. (Previously Presented) The method of claim 26, wherein the epitope is selected from the group consisting of EQKLISEEDL **(SEQ ID NO: 1)**, GKPIPNPLLGLDST **(SEQ ID NO: 2)**, YPYDVPDYA **(SEQ ID NO: 3)**, NVRFSTIVRRRA **(SEQ ID NO: 4)**, KQMSDRRENDMSPS **(SEQ ID NO: 5)**, SGNEVSRAVLLPQSC **(SEQ ID NO: 6)**, SSLSYTNPAVAATSANL **(SEQ ID NO: 7)**, RSTLQHPDYLQEYST **(SEQ ID NO: 8)**, VSTLLRWERFPGHRQA **(SEQ ID NO: 9)**, KFQQLVQCLTEFHAALGAYV **(SEQ ID NO: 10)**, QEQCQEVWRKRVISAFLKSP **(SEQ ID NO: 11)**, and RLSDKTGPVAQEKS **(SEQ ID NO: 12)**.

28. (Previously Presented) The method of claim 23, wherein the construct additionally comprises a promoter element upstream of the nucleic acid sequence comprising (i) a nucleic acid sequence encoding beta-lactoglobulin, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues.

29. (Canceled)

30. (Previously Presented) The method of claim 22, wherein the nucleic acid construct comprises a stress inducible promoter which is operatively isolated from a nucleic acid sequence encoding beta-lactoglobulin by a nucleotide sequence flanked by nucleic acid sequences recognized by a site specific recombinase, or by insertion such that it is inverted with respect to the transcription unit encoding beta-lactoglobulin, in which the construct additionally comprises a nucleic acid sequence comprising a tissue specific promoter operatively linked to a gene encoding the coding sequence for the site specific recombinase.

31. (Previously Presented) The method of claim 30, wherein the site-specific recombinase sequences are two *lox*P sites of bacteriophage P1.

32. (Canceled)

33. (Currently Amended) A method of screening for, or monitoring of toxicologically induced stress in a transgenic ~~rodent~~ mouse, comprising the step of detecting a gene activation event in a cell *in vivo*, comprising assaying said transgenic ~~rodent~~ mouse whose cells express a nucleic

acid construct as defined in claim ~~24~~ 28, in which the ~~rodent~~ mouse is subjected to a gene activation event that is signaled by expression of a peptide tagged beta-lactoglobulin reporter gene, wherein the gene activation event is the result of toxicological stress.

34. (Canceled)

35. (Canceled)

36. (New) A method of detecting a gene activation event in a cell *in vivo* which is the result of induction of toxicological stress, the method comprising assaying a transgenic rat whose cells express a peptide-tagged beta-lactoglobulin protein as a reporter gene in which the beta-lactoglobulin is coded for by a nucleic acid construct comprising (i) a nucleic acid sequence encoding beta-lactoglobulin, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues, in which the rat is subjected to a gene activation event by toxicological stress that is signaled by expression of the peptide tagged beta-lactoglobulin reporter gene.

37. (New) The method of claim 36, wherein the beta-lactoglobulin protein is heterologous to the cell in which it is expressed.

38. (New) The method of claim 36, wherein the beta-lactoglobulin is ovine betalactoglobulin (BLG) (SEQ ID NO: 23).

39. (New) The method of claim 38, wherein the peptide sequence is an epitope.

40. (New) The method of claim 40, wherein the epitope is selected from the group consisting of EQKLISEEDL **(SEQ ID NO: 1)**, GKPIPNPLLGLDST **(SEQ ID NO: 2)**, YPYDVPDYA **(SEQ ID NO: 3)**, NVRFSTIVRRRA **(SEQ ID NO: 4)**, KQMSDRRENDMSPS **(SEQ ID NO: 5)**, SGNEVSRAVLLPQSC **(SEQ ID NO: 6)**, SSLSYTNPAVAATSANL **(SEQ ID NO: 7)**, RSTLQHPDYLQEYST **(SEQ ID NO: 8)**, VSTLLRWERFPGHRQA **(SEQ ID NO: 9)**, KFQQLVQCLTEFHAALGAYV **(SEQ ID NO: 10)**, QEQCQEVWRKRVISAFLKSP **(SEQ ID NO: 11)**, and RLSDKTGPVAQEKS **(SEQ ID NO: 12)**.

41. (New) The method of claim 37, wherein the construct comprises a promoter element upstream of a nucleic acid sequence comprising (i) a nucleic acid sequence encoding beta-lactoglobulin, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues.

42. (New) The method of claim 36, wherein the nucleic acid construct comprises a stress inducible promoter which is operatively isolated from a nucleic acid sequence encoding beta-lactoglobulin by a nucleotide sequence flanked by nucleic acid sequences recognized by a site specific recombinase, or by insertion such that it is inverted with respect to the transcription unit encoding beta-lactoglobulin, in which the construct additionally comprises a nucleic acid sequence comprising a tissue specific promoter operatively linked to a gene encoding the coding sequence for the site specific recombinase.

43. (New) The method of claim 43, wherein the site-specific recombinase sequences are two *lox*P sites of bacteriophage P1.

44. (New) A method of screening for, or monitoring of toxicologically induced stress in a transgenic rat, comprising the step of detecting a gene activation event in a cell *in vivo*, comprising assaying said transgenic rat whose cells express a nucleic acid construct as defined in claim 41, in which the rat is subjected to a gene activation event toxicological stress that is signaled by expression of a peptide tagged beta-lactoglobulin reporter gene, wherein the gene activation event is the result of toxicological stress.